

WHAT IS CLAIMED IS :

1. A method for preparing an oxidizing material comprising the step of (i) dispersing in colloidal form a metal or metal compound in an aqueous solution of an inorganic aluminosilicate polymer, said aluminosilicate being able to 5 form an inorganic gel, and said metal or metal compound being able to cause the oxidation of oxidizable products and (or) micro-organisms to be eliminated, and the step of (ii) adding a base to cause said aluminosilicate to gel.

2. The method according to Claim 1, wherein said metal is 10 selected from among the metals silver, zinc, copper, iron, titanium, lead or nickel, and wherein the metal compound contains at least one of said metals.

3. The method according to Claim 2, wherein the metal is silver in powder form of which most of the particles are of diameter less than or 15 equal to 10 microns, and able to form a colloid when dispersed in said aqueous solution of aluminosilicate.

4. The method according to Claim 1, wherein said inorganic aluminosilicate polymer is imogolite. 20

5. The method according to Claim 1, further including, before the step (ii), the step of (iii) dispersing a bacterial growth control agent in the aqueous aluminosilicate solution.

- 25 6. The method according to Claim 1, further including, before the step (ii), the step of (iv) hydrolyzing an alkylalkoxysilane of formula $\text{RSiR}^1_x(\text{OR}^2)_{3-x}$, wherein R is an alkyl group containing an $-\text{SH}$ or $-\text{S}(-\text{CH}_2)_n-\text{S}-$ function with n between 0 and 4, R^1 and R^2 are independently a methyl or ethyl group and x is 0 or 1, said aluminosilicate polymer comprising active hydroxyl 30 groups on its surface.

7. An oxidizing material obtainable by a method for preparing said oxidizing material comprising the step of (i) dispersing in colloidal form a metal or metal compound in an aqueous solution of an inorganic aluminosilicate polymer, said aluminosilicate being able to form an inorganic gel, and said metal or metal compound being able to cause the oxidation of oxidizable products and (or) micro-organisms to be eliminated, and the step of (ii) adding a base to cause said aluminosilicate to gel.

8. The oxidizing material according to Claim 7, wherein said metal is selected from among the metals silver, zinc, copper, iron, titanium, lead or nickel, and wherein the metal compound contains at least one of said metals.

9. The oxidizing material according to Claim 8, wherein the metal is silver in powder form of which most of the particles are of diameter less than or equal to 10 microns, and able to form a colloid when dispersed in said aqueous solution of aluminosilicate.

10. The oxidizing material according to Claim 7, wherein said inorganic aluminosilicate polymer is imogolite.

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11. The oxidizing material according to Claim 7, further comprising a bacterial growth control agent dispersed in the aluminosilicate polymer.

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12. The oxidizing material according to Claim 7, further comprising on the surface of the aluminosilicate polymer at least an organic radical having a -SH or -S(-CH₂)_n-S- function with n between 0 and 4.

13. The use of the material according to Claim 7 to oxidize
30 oxidizable chemicals and (or) micro-organisms to be eliminated.

14. A method for treating an aqueous solution liable to contain oxidizable chemicals to be eliminated and (or) to harbor micro-organisms, that involves placing said aqueous solution in contact with the oxidizing material according to Claim 7, and placing said aqueous solution in contact with an inorganic aluminosilicate polymer in fiber form in which a bacterial growth control agent is dispersed.

5 15. A method for treating an aqueous solution liable to contain silver in ionic form and oxidizable chemicals to be eliminated and (or) to harbor micro-organisms, that involves placing said solution in contact with the oxidizing material according to Claim 7, and placing said aqueous solution in contact with an inorganic imogolite polymer in fiber form comprising at least on the surface of the fibers an organic radical containing an $-SH$ or $-S(-CH_2)_n-S-$ function with n between 0 and 4.

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16. A method for treating an aqueous solution liable to contain silver in ionic form and oxidizable chemicals to be eliminated and (or) to harbor micro-organisms, that involves placing said aqueous solution in contact with the oxidizing material according to Claim 12.

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17. The method according to any of Claims 14 to 16 for the treatment of a photographic bath.

25 18. The method according to Claim 17, wherein the photographic bath is a wash bath.

30 19. A device for the treatment of an aqueous solution liable to contain oxidizable chemicals to be eliminated and (or) to harbor micro-organisms, comprising a support that is permeable to said aqueous solution and in which is placed the oxidizing material according to Claim 7.